

## Grease Management

Last Updated Wednesday, 28 June 2006

### GREASE MANAGEMENT: Food Service Facilities

Do you need a grease removal device?

Washwater may seem clean and therefore not in need of treatment; however, as the water flows from the sink to the sanitary sewer the grease which was suspended in the water is deposited on the walls of the city sewer line.

Grease and oily wastewater from restaurants, delicatessens, and other food service facilities clog sewer drains when disposed of improperly. Installation of a grease removal device by each facility that generates oil, fats or grease is required by city of Boulder ordinance.

- You must install a grease removal device if you are building or remodeling a food service facility.
- You must install a grease removal device if your facility has been cited for a grease violation or contributing to a grease blockage in the city sewer lines.

Grease removal devices are important to minimize the amount of grease in local sewer lines and to provide appropriate disposal for the kinds of restaurants cleaning wastes that commonly reached a street or storm drain in the past. Fry hoods, floor mats, and other greasy equipment should be cleaned in an area where cleaning water will be captured in grease removal device.

Other regulatory requirements

In order to install a grease removal device you will need a plumbing permit from the city of Boulder Building Services Center. For more information about permit applications and requirements, see "Obtaining Necessary Permits".

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[Frequently Asked Questions \(FAQs\)](#)

Q. How should mop water be managed?

A. Mop water should be poured into a drain inside the building. If the water contains any grease it should be poured into a drain that is connected to the grease interceptor. Floor washwater should never be squeegeed outside. Clean up any

spilled grease before mopping to reduce the amount of grease in the mop water.

Q. How should mats be cleaned?

A. Mats can be taken to a coin operated carwash or run through the dishwasher. Both methods ensure that the washwater and dirt end up in the sanitary sewer.

Q. How should outdoor eating areas be cleaned?

A. "Spot clean" outdoor areas with rags. If a mop and water must be used, the standing water must be collected and disposed of inside. Clean thoroughly, as any residual that is left may end up in a creek with the next rain or snow storm.

Q. What do I do if the dumpster or fryer grease bin is leaking?

A. The outside area should be routinely inspected and swept. If grease is observed on the ground, use dry cleaning methods to remove it. Wipe up the grease spill with rags then sprinkle saw dust or some type of absorbent to absorb the remaining grease and sweep again. If the water is not used, it must be collected and disposed of inside the facility. The source of the leak should be identified and eliminated. Your trash hauler or fryer grease recycler must provide leak proof containers. Dumpsters and fryer grease bins ideally should be stored under cover away from rain and snow.

Q. How do I clean our exhaust hood filters?

A. Clean them as you would the floor mats, using the mop sink, dishwasher or coin operated car wash.

Q. What should go in the storm drain outside?

A. Storm drains are designed to collect rain water only. The water flows from these manmade structures directly into local creeks. As a reminder, the city of Boulder can stencil the drain with "NO DUMPING FLOWS TO CREEK." If your business is located in the city of Boulder, call 303-413-7350 for more information about how you can prevent water pollution.

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## COMMON TERMS

Food service facility - Non-residential establishment engaged in producing food or food products.

Grease removal device - An interceptor, trap or other mechanical device designed, constructed and intended to remove, hold or otherwise prevent the passage of grease to a publicly owned treatment works.

Grease interceptor - A concrete chamber where greasy wastewater from the kitchen is retained so that grease can float to the top and the clearer water beneath can flow out to the sanitary sewer. Capacity must be determined using the International Plumbing Code. The minimum size is 750 gallons.

Grease trap - A device, generally smaller than a grease interceptor, designed to retain grease from one to four fixtures. Garbage grinders or dishwashers must not discharge to a grease trap.

Plumbing fixture - An approved receptacle, device, or appliance, directly or indirectly connected to a drainage system such as the sanitary sewer, that supplies or receives water or liquid borne wastes.

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#### Recycleable Grease Storage

Waste grease from a kitchen is recyclable for use in making soap, animal feed, etc. Grease from a grease trap or interceptor may not be reused in this way. For recyclable grease, the city of Boulder recommends that all facilities have waste grease containers, with tight fitting lids, that are either secondarily contained or kept in a bermed area to protect floor drains and storm drain inlets from spills.

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#### Other Types of Devices

A grease trap may be approved in lieu of an interceptor for full service food service facilities only in very limited circumstances when space is not available. Grease traps may also be approved by the Industrial Pretreatment Program for facilities such as delicatessens and small bakeries that produce small quantities of oil, grease, or fat. Refer to the International Plumbing Code for requirements related to grease traps such as installation of flow-control devices, flow rates, and other structural requirements. Please Note: flow restrictors are required for grease traps because they increase retention time and efficiency. Automatic grease skimming devices collect small volumes of water and remove grease into a side container at preset times each day. Special approval from the Industrial Pretreatment Staff is required to install one of these devices in lieu of a grease interceptor. Manufacturers of bacterial additives claim that their products "break down" grease and enhance the performance of grease traps and interceptors. Such additives cannot be substituted for a grease removal device and regular inspection and maintenance. If you decide to use an additive, make sure the product you select is not an emulsifier, which simply keeps grease in suspension temporarily and allows it to flow to the sewer system.

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#### Best Management Practices

Minimize the amount of grease your facility sends to a grease removal device. Reduce cleaning frequency, hauling costs, and blockages by following these steps:

- Food waste from plates goes in the trash, not down the drain.
- Prewash plates by spraying them off with cold water over a small mesh basket positioned over the drain. This catch basin should be emptied into a garbage can.
- Contract with a grease recycling service to provide a waste grease container/bin.
- Dispose of grease properly and keep bin covered.
- If applicable, check grease trap (small device inside facility) daily and clean regularly.
- Install a large capacity grease interceptor and use a professional for interceptor cleaning.
- Pour washwater into mop sink connected to a grease removal device.

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## Grease Removal Devices

Guidelines for selecting and installing the right grease removal device for your business

A grease interceptor is required by local ordinance for full-service restaurants. Smaller-capacity grease traps provide inadequate retention time for efficient grease recovery. (See page 4 for exceptions noting when grease traps are acceptable.) To calculate the size of the grease interceptor you need, have a licensed plumbing contractor determine this based on the International Plumbing Code.

## Installation

A grease interceptor must be installed by a licensed plumbing contractor. This contractor can handle all aspects of installation including equipment procurement, plumbing, and in-ground installations that include excavations and concrete/ asphalt cutting and repair. The cost of installation will vary depending on your site. Cost factors include the size of the device, space, grade, proximity to a sewer line, and above-ground or in-ground installation. For competitive pricing, get more than one quote.

## Maintenance

Regular inspection and maintenance is essential to the proper operation of a grease removal device. The local ordinance requires a minimum cleaning frequency of once every six months. However, that frequency will increase depending on

the capacity of the device, the amount of grease in the wastewater, and the degree to which the facility has contributed to blockages in the past. Regular cleaning at the appropriate interval is necessary to maintain the rated efficiency of the device. Equipment that is not regularly maintained puts the food service facility at risk of violating the sewer use ordinance, and this may not be known until an overflow and violation have occurred. The city of Boulder suggests businesses start with quarterly cleanings. The Manual of Practice FD-3 published by the Water Environment Federations technical practice committee suggests cleaning should be done when 75 percent of the retention capacity of the unit is 75 percent full of accumulated grease. A large measuring stick and/or a clear piece of conduit may be used to determine the depth of the depth of grease accumulation. You must contract with a licensed grease hauler to remove it from your premises for appropriate disposal.

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### Choosing a Grease Hauler

When selecting a grease hauler, be aware that services and prices can vary. Minimum services should include:

- Complete pumping and cleaning of the interceptor and sample box, rather than just skimming the grease layer.
- Deodorizing and thorough cleaning of affected areas, as necessary.
- Disposal/reclamation at an approved location.
- Notes concerning the condition of the interceptor
- Complete pumping and cleaning record.

You and your hauler should agree on an adequate cleaning frequency to avoid blockage of the line.

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### Record Keeping

Careful record keeping is one of the best ways to ensure that your grease removal device is being cleaned and maintained on a regular basis. City code requires records be maintained for a minimum of three years. The cleaning record form on the enclosed insert is provided by the city of Boulder as an example of the type of record keeping suggested.

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### Necessary Permits

- Building departments prefer in-ground installations that drain by gravity to the sanitary sewer. Avoid pumps and other mechanical devices in your connection to the sewer if possible.

- Size your interceptor in accordance with the International Plumbing Code.
- For information and approval of grease removal device installation, call:

City of Boulder Industrial Pretreatment Program 303-413-7350

City of Boulder Building Services Center 303-441-1880

For more information or copies of the brochure, call the Industrial Pretreatment Program 303-413-7350.

Acknowledgements: PACE and the city of Palo Alto